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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,831	02/05/2002	Pradeep Tumati	023666.00002(PTU02)	9012
7590 11/29/2004			EXAMINER	
McNair Law Firm, P.A. P.O. Box 10827 Greenville, SC 29603			MITCHELL, JASON D	
			ART UNIT	PAPER NUMBER
			2124	
DATE MAILED: 11/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/067,831

Applicant(s)

TUMATI, PRADEEP

Examiner

Jason Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This application claims priority to U.S. provisional application 60/302,420 filed on 07/02/2001.
2. Claims 1-38 are pending in this case.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claims 2, 6, 11, 13, 17, 19, 20 and 25 recite the limitation "said target application" in lines 15, 3, 5, 10, 2, 11, 11, 14, 9-10, 12, 9-10 respectively. There is insufficient antecedent basis for this limitation in the claims.** For the purposes of this examination "said target application" will be assumed to refer to "said target software application".
5. **Claims 6, 13, 25, 31 and 37 recite the limitation "said executing software application" in lines 3, 3, 2, 3 and 3, respectively. There is insufficient antecedent basis for this limitation in the claim.** For the purposes of this examination "said executing software application" will be assumed to refer to "said target software application".
6. **Claim 12 recites the limitation "said first grain" on page 2, lines 2-3. There is insufficient antecedent basis for this limitation in the claim.** For the purposes of this examination "said first grain" will be assumed to refer to "said first version grain".

7. **Claim 16 recites the limitation "said target application's" in line 2. There is insufficient antecedent basis for this limitation in the claim.** For the purposes of this examination "said target application's" will be assumed to refer to "said target software application's".

8. **Claim 25 recites the limitation "said active grain" in 4. There is insufficient antecedent basis for this limitation in the claim.** For the purposes of this examination "said active grain" will be assumed to refer to "said active crumb".

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-38 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,359,730 to Marron (Marron).**

**Regarding Claims 1, 8, 14 and 32:** Marron discloses a computerized system embodied in a computer readable medium for modifying a target software application segmented into first version grains (col. 7, lines 1-3 'the change modules'), comprising: a set of computer readable instructions embodied in said computer readable medium for: receiving a hot pack (col. 6, lines 50-59 'the new programs are created') having a dictum (col. 6, lines 50-59 'machine readable change-instructions') and a second version grain (col. 6, lines 50-59 'new programs') associated with at least one of said

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first version grains (col. 6, lines 50-59 'modifying the old programs'), opening said hot pack (col. 7, lines 49-51 'store load modules ... and change-instructions ... in program library'), suspending said target software application (col. 7, lines 36-40 'places the process in a wait state'), determining the status of said dictum (col. 8, lines 32-35 'to determine ... whether program A or program A' should be executed'), modifying at least one of said first version grains of said target software application (col. 8, lines 49-52 'storing in such address pointers to the new code') according to said second version grain and said dictum of said hot pack if said determination of said status of said dictum allows for its immediate modification, (col. 8, lines 43-44 'determines if all process are safe') and, resuming execution of said target application so that modification of said target software application is achieved without halting its execution (col. 8, lines 32-37 'pass control to the ... program for execution').

**Regarding Claims 20 and 26:** Marron discloses a method and system for modifying a target software application segmented into first version grains (col. 7, lines 1-3 'the change modules') with each of the first version grains having associated crumbs (col. 7, lines 9-11 'safety point') with the associated crumbs having an active and inactive state (col. 8, lines 32-35 'determine ... whether program A or program A' should be executed'), comprising the steps of: providing a hot pack (col. 6, lines 50-59 'the new programs are created') having a dictum (col. 7, lines 49-51 'store load modules ... and change-instructions ... in program library') and a second version grain (col. 6, lines 50-59 'new programs'), suspending said target software application (col. 7, lines 36-40 'places the process in a wait state'), determining the status of said dictum (col. 8, lines

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32-35 'to determine ... whether program A or program A' should be executed'), modifying at least one of said first version grains of said target software application according to said second version grain and said dictum of said hot pack (col. 8, lines 49-52 'storing in such address pointers to the new code') if said determination of said status of said dictum allows for its immediate modification (col. 8, lines 43-44 'determines if all process are safe'), and, resuming execution of said target application so that modification of said target software application is achieved without halting its execution (col. 8, lines 32-37 'pass control to the ... program for execution').

**Regarding Claim 2, 9, 15, 21, 27 and 33:** The rejections of claims 1, 8, 14, 20, 26 and 32 are incorporated, respectively; further Marron discloses triggering performance of a validity operation (col. 8, lines 5-9 'installs traps ... at all safety points') according to said dictum so that data and functional integrity is maintained within said target software application (col. 7, lines 3-11 'conditions which must be satisfied when processes can ... start executing the new program ... deemed to be "safety points"') subsequent modification of said target software application (col. 8, lines 5-9 'installs traps').

**Regarding Claim 3, 10, 16, 22, 28 and 34:** The rejections of claims 1, 8, 14, 20, 26 and 32 are incorporated, respectively; further Marron discloses copying said second version grain (col. 7, lines 55-58 'loads copies of the new programs ... into memory') within said address space of said target software application (col. 8, lines 49-52 'storing in such addresses pointers to the new code').

When copying to an address space it is necessary to resize that address space if the object being copied is larger than the available memory. Therefore by copying said

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second version grain into the address space of the target software application Marron inherently discloses resizing the address space of said target software application according to said hot pack.

**Regarding Claim 4, 11, 17, 23, 29 and 35:** The rejections of claims 1, 8, 16, 20, 26 and 32 are incorporated, respectively; further Marron discloses copying said dictum into said address space of said target software application (col. 7, lines 61-66 'creates a change descriptor ... in memory').

When copying to an address space it is necessary to resize that address space if the object being copied is larger than the available memory. Therefore by copying said dictum into the address space of the target software application Marron inherently discloses resizing the address space of said target software application according to said hot pack.

**Regarding Claim 5, 12, 18, 24, 30 and 36:** The rejections of claims 1, 8, 14, 20, 26 and 32 are incorporated, respectively; further Marron discloses at least one crumb (col. 8, lines 5-9 'installs traps') associated with at least one of said first version grains (col. 8, lines 5-9 'at all safety points') having an active and inactive state (col. 8, lines 32-35 "determine ... whether program A or program A' should be executed"), and, said computer readable instructions include instructions for activating said associated crumbs (col. 8, lines 32-35 'determine from the safety status') upon the determination that said status of said dictum associated with said first version grain does not allow for its immediate execution (col. 7, lines 52-52 'initially marks all process and tasks as "unsafe").

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**Regarding Claim 6, 13, 19, 25, 31 and 37:** The rejections of claims 5, 12, 18, 24, 30 and 36 are incorporated, respectively; further, Marron discloses when encountering said crumb in an active state: suspending said executing software application (col. 8, lines 12-14 'a trap can ... cause an interrupt'); determining whether said dictum associated with said active crumb can be executed (col. 8, lines 32-35 "determine ... whether program A or program A' should be executed"); modifying said first version grain according to said second version grain and said dictum (col. 8, lines 49-52 'storing in such address pointers to the new code') if said determination of whether said dictum can be executed is affirmative (col. 8, lines 43-44 'determines if all process are safe'), and resuming execution of said target software application so that said target application is modified without halting its execution (col. 8, lines 36-37 'pass control ... for execution').

**Regarding Claim 7 and 38:** The rejections of claims 6 and 37 are incorporated, respectively; further Marron discloses adding at least one crumb to at least one of said first version grains that are to be modified according to said hot pack (col. 8, lines 5-9 'installs traps').

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,274,815 to Trissel et al.; US 6,006,034 to Heath et al.; US 6,189,145 B1 to Bellin et al; US 6,202,208 B1 to Holiday; US 6,289,510 to Nakajima; and US 6,817,015 B2 to Takata.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Mitchell  
11/16/04



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PRIMARY EXAMINER